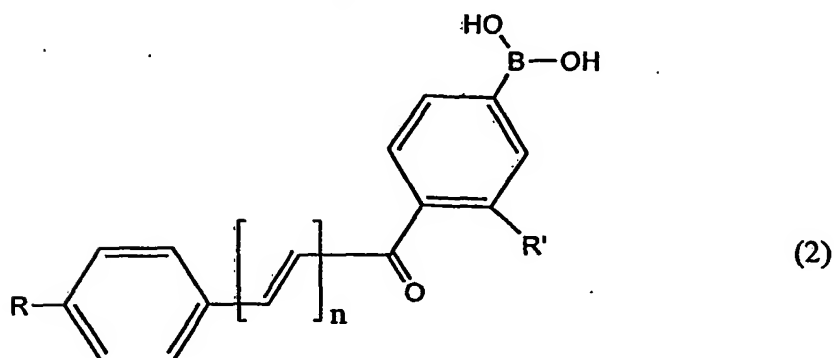
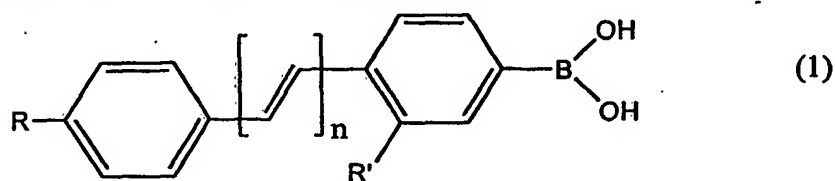


What is claimed is:

1. An ophthalmic sensor, comprising an ophthalmic device having a polymer matrix; and a molecular sensing moiety in and/or on said ophthalmic device, wherein the molecular sensing moiety interacts or reacts with sugar to provide an optical signal which is indicative of sugar level in an ocular fluid, wherein the molecular sensing moiety is or is derived from a compound having the structural formula (1) or (2)



wherein R' is H or an olefinically unsaturated, crosslinkable radicals having up to 25 carbon atoms;

R is H, NR₁R₂, CN, OCH₃, or a radical constituent capable of donating an electron to or accepting an electron from adjacent aromatic system, wherein R₁ is H or C₁-

C₈ alkyl while R₂ is a C₃-C₂₅ radical terminated with $\begin{array}{c} \text{---C---C=CH}_2 \\ \parallel \quad | \\ \text{O} \quad \text{H} \end{array}$ or $\begin{array}{c} \text{---C---C=CH}_2 \\ \parallel \quad | \\ \text{O} \quad \text{CH}_3 \end{array}$;

and

n is an integer from 1 to 5.

2. The ophthalmic sensor of claim 1, wherein the ophthalmic device is a contact lens, a corneal onlay or an implantable ophthalmic device.
3. The ophthalmic sensor of claim 1 or 2, wherein the polymer matrix is obtained by polymerization of a material forming the ophthalmic device.

4. The ophthalmic sensor of claim 3, wherein the material forming the ophthalmic device comprises one or more prepolymers.
5. The ophthalmic sensor of claim 4, wherein the one or more prepolymers are silicone-containing prepolymers, silicone-free prepolymers, or a mixture thereof.
6. The ophthalmic sensor of claim 3, wherein the material forming the ophthalmic device comprises a mixture of monomers and optionally a macromer or a mixture of one or more prepolymers with one or more monomers and/or macromers.
7. The ophthalmic sensor of any one of claims 1 to 6, wherein R' is an olefinically unsaturated, crosslinkable radicals having up to 25 carbon atoms.
8. The ophthalmic sensor of any one of claims 1 to 6, wherein R is NR₁R₂, wherein R₁ is H or C₁-C₆ alkyl while R₂ is a C₃-C₂₅ radical terminated with

$$\begin{array}{c} \text{---C---C=CH}_2 \\ \parallel \quad | \\ \text{O} \quad \text{H} \end{array} \quad \text{or} \quad \begin{array}{c} \text{---C---C=CH}_2 \\ \parallel \quad | \\ \text{O} \quad \text{CH}_3 \end{array}$$
9. The ophthalmic sensor of any one of claims 1 to 8, wherein the molecular sensing moiety is covalently attached to the surface of the ophthalmic device.